



science for a changing world

<http://astrogeology.usgs.gov>

Orbit

Mean distance from Earth: 238,328 miles

Orbital Period & Length of Day

27.32 Earth days

Tilt of Rotation Axis

6.7 degrees, versus 23.5 degrees for Earth

Size

Diameter: 0.27 of Earth's diameter

Surface Gravity

0.17 of Earth's gravity

If you weigh 80 pounds on Earth, you would only weigh about 14 pounds on the Moon!

Mass

.01 of Earth's mass

Surface Temperature

Mean temperature: -4 degrees Fahrenheit

Temperature extremes: 225 degrees Fahrenheit to -243 degrees Fahrenheit

Atmosphere

None

Surface

Heavily cratered

Basaltic and anorthositic

Significant Dates

1610 Galileo makes the first telescopic observations of the Moon

1959-60 Luna 1-3 (U.S.S.R.) were the first craft to fly by, impact, and photograph the far side of the Moon

1964 Ranger 7 data indicated that the lunar surface would be suitable for a piloted landing

1966 Soviet Luna 9 made the first soft landing on the Moon

1966-67 Lunar Orbiters photographically mapped the Moon

1968 Apollo 8, first piloted flight to the Moon, circled 10 times before returning to Earth

1969 Apollo 11, first human landing on the Moon, returned rock and soil samples

1970 Luna 16 was the first of 3 Soviet missions to use a robotic rover to return lunar soil samples.

1972 Apollo 17 was the last of 6 Apollo missions to land astronauts and return samples from the Moon

1994 Clementine conducted multispectral mapping and measured elevations on the Moon

1998 Lunar Prospector made a geochemical map of the Moon and discovered ice at both poles

Earth's Moon



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Every civilization has had a name for the satellite of Earth that is known, in English, as the Moon. The Moon is known as Luna in Italian, Latin, and Spanish, as Lune in French, as Mond in German, and as Selene in Greek.